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Nota di contenuto	Advances in Ceramic Armor VI; Contents; Preface; Introduction; Inspecting Composite Ceramic Armor Using Advanced Signal Processing Together with Phased Array Ultrasound; A Comparison of NDE Methods for Inspection of Composite Ceramic Armor; NDT Characterization of Boron Carbide for Ballistic Applications; Advanced Nondestructive Ultrasound Characterization of Transparent Spinel; Optimization of a Portable Microwave Interference Scanning System for Nondestructive Testing of Multi-Layered Dielectric Materials Corrective Techniques for the Ultrasonic Nondestructive Evaluation of Ceramic MaterialsQuantitative Evaluation of Structural Damage in Lightweight Armor Materials Via XCT; Static and Dynamic Properties of Mg/Ceramic MMCs; Impact Study of AlN-AlON Composite; Ballistic Evaluation and Damage Characterization of Metal-Ceramic Interpenetrating Composites for Light Armor Applications; Effect of an

Interface on Dynamic Crack Propagation; Dynamic Equation of State and Strength of Boron Carbide; Multiscale Modeling of Armor Ceramics; Future Transparent Materials Evaluated through Parametric Analysis Nano-Processing for Larger Fine-Grained Windows of Transparent SpinelExperimental Methods for Characterization and Evaluation of Transparent Armor Materials; Method for Producing SiC Armor Tiles of Higher Performance at Lower Cost; Development of Biomorphic SiSiC- and C/SiSiC-Materials for Lightweight Armor; Influence of Impurities on Stacking Fault Dynamics in SiC under External Loading; Evolution of the AlN Distribution during Sintering of Aluminium Nitride Doped Silicon Carbide; Microstructure, Mechanical Properties, and Performance of Magnesium Aluminum Boride (MgAlB₁₄) Microstructural Development and Phase Changes in Reaction Bonded Boron CarbideAuthor Index

Sommario/riassunto

The Armor Ceramics Symposium was held January 25-27, 2010 in Daytona Beach, FL as part of the 34th International Conference & Exposition on Advanced Ceramics and Composites. The 8th edition of this symposium consisted of over 65 oral and poster presentations on topics such as Impact, Penetration and Material Modeling, Boron Carbide, Silicon Carbide, Dynamic Material Behavior, Transparent Materials and NDE Applications. The symposium continues to foster discussion and c
